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## GENERALIZED GRANULOMA ANNULARE SUCCESSFULLY TREATED WITH USTEKINUMAB

**Dear Editor:**

We previously reported a case of a 58-year-old-woman with generalized granuloma annulare (GA) that did not respond to 28 weeks of treatment with tildrakizumab, a selective interleukin-23 inhibitor currently approved for the treatment of moderate-to-severe plaque psoriasis.[1] Given that granuloma formation is mediated primarily by Th1 cytokines such as interferon-gamma and tumor necrosis factor, we posited that less selective inhibition with ustekinumab—an interleukin-12/-23 inhibitor which inhibits both Th17 and, more importantly, Th1 signaling—may be beneficial. Indeed, Hassoun et al[2] reported a case of a granulomatous dermatitis that was successfully treated with ustekinumab.

Here, we report a case of a 70-year-old woman with generalized GA that cleared after 16 weeks of treatment with ustekinumab. The patient reported that her rash developed suddenly on her inner arms, thighs, and calves six weeks prior to presentation (Figure 1). Histopathology was consistent with granuloma annulare. She was initially treated with 60mg of triamcinolone (Kenalog; Bristol-Myers Squibb, New York, New York) intramuscularly, which led to a reduction in her pruritus without visible improvement in her skin lesions. She was then treated with three months of methotrexate, escalating to 15 mg per week with betamethasone augmented 0.05% cream without any further improvement. The patient was not a candidate for hydroxychloroquine or dapsone due to numerous drug–drug interactions. After four months of treatment failure, the patient agreed to off-label use of ustekinumab.

Four weeks after her first dose of ustekinumab (90 mg), the patient noted a significant reduction in her itching with decreased erythema in her lesions. She received subsequent doses of ustekinumab at Weeks 4 and 10. At her 16-week follow-up visit, the patient's skin was clear with just barely perceptible post-inflammatory erythema (Figure 2). Given how well she was doing, the patient elected to stop further treatment.

Compared to tumor necrosis factor inhibitors, which have also been shown to be effective in GA,[3] the dosing regimen of ustekinumab is more favorable, and therefore it is easier to assess efficacy with drug samples before pursuing payor approval. We hope that our case will encourage other health care providers, and ultimately members of industry, to validate our initial findings through dedicated studies.

With regard,

**EINGUN JAMES SONG, MD, FAAD**

**AFFILIATIONS.** *Dr. Song is with North Sound Dermatology in Mill Creek, Washington.*

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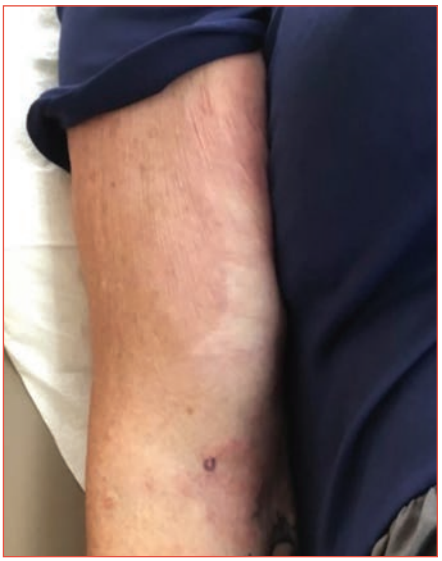
**CORRESPONDENCE.** *Eingun James Song, MD, FAAD; Email: esong812@gmail.com*



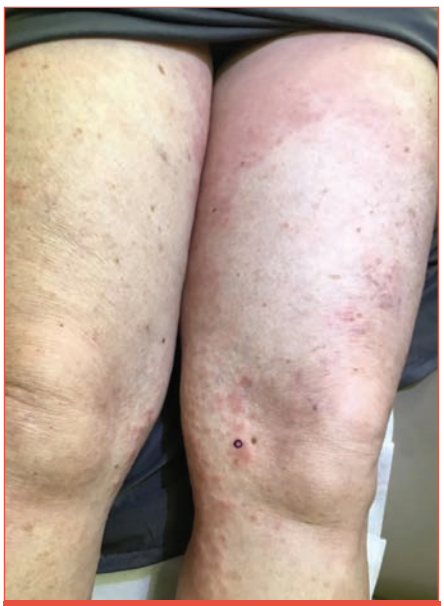


**FIGURE 1.** Baseline photographs taken before treatment with ustekinumab

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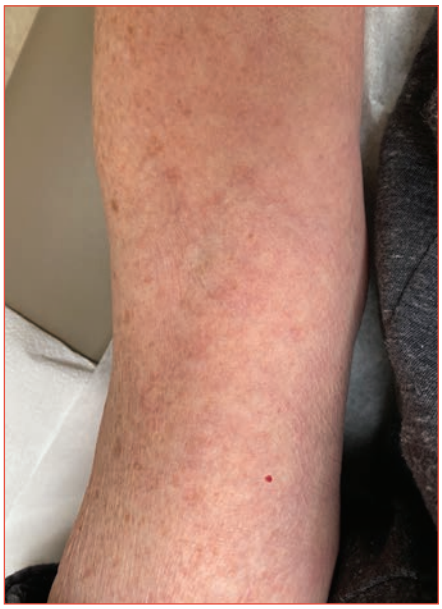

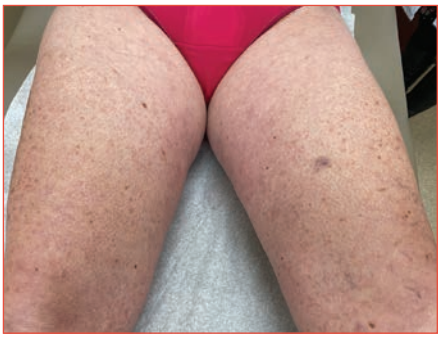

**FIGURE 2.** Photographs taken 16 weeks into treatment with ustekinumab